faults and does not need insertion of disabled logic, in particular, in critical paths crossing clock domains. However, unlike the isolated or ratio'ed DFT approach, this approach requires testing of all clock domains in series, resulting in long test time. It also requires significant design and layout efforts on re-timing (or synchronizing) all clock domains.

Al encld.

R E M A R K S

The above amendment has been made to correct a typographical error.

Respectfully submitted,

Jim Zegeer

Jim Zegeer, Reg. No. 18,957
Attorney for Applicants

Attachment:
Version with Markings to Show Changes Made

Suite 108
801 North Pitt Street
Alexandria, VA 22314
Telephone: 703-684-8333

Date: June 6, 2002

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Serial No. 10/067,372 . . . . . Sheet 1 of 1

-- In using the [one-shot] one-hot DFT technique, each crossing clock-domain signal flowing into its receiving clock domains must be initialized to or held at a predetermined logic value of 0 or 1 first. This initialization is usually accomplished by shifting in predetermined logic values to all clock domains so that all crossing clock-domain signals are forced to a known state. Testing is then conducted domain-by-domain, thus, called one-hot testing. See U.S. Pat. No. 5,680,543 issued to Bhawmik et al. (1997). The major benefits of using this approach are that it can still detect or locate crossing clock-domain faults and does not need insertion of disabled logic, in particular, in critical paths crossing clock domains. However, unlike the isolated or ratio'ed DFT approach, this approach requires testing of all clock domains in series, resulting in long test time. It also requires significant design and layout efforts on re-timing (or synchronizing) all clock domains. --